

08/051,96T

(FILE 'HOME' ENTERED AT 09:43:42 ON 01 JUN 1998)

FILE 'CAPLUS, EMBASE, BIOSIS, MEDLINE, WPIDS' ENTERED AT 09:44:04
ON 01 JUN 1998

L1 4339 S (YOUNG, A ? OR YOUNG A ?)/AU,IN
L2 21 S (GEDULIN, B ? OR GEDULIN B ?)/AU,IN
L3 63 S (BEYNON, G ? OR BEYNON G ?)/AU,IN
L4 0 S L1 AND L2 AND L3
L5 4403 S L1 OR L2 OR L3
L6 117 S L5 AND (AMYLIN?)
L7 23439 S (NONSTEROIDAL) (2A) (ANTI) (2A) (INFLAMMAT?) OR NSAID?
L8 216224 S (SALICYCLATE? OR ASPIRIN? OR IBUPROFEN? OR PHENACETIN?
L9 229378 S L7 OR L8
L10 0 S L6 AND L9
L11 9 S L5 AND L9
L12 789032 S (GASTRITIS) OR (INFLAMMAT?) OR (ULCER?) OR (ANTACID?) O
L13 52 S L5 AND L12
L14 1 S L13 AND (AMYLIN?)
L15 2 S (AMYLIN?) AND (GASTRITIS)
L16 19 S (GASTROSIS?)
L17 1 S (AMYLIN?) AND (GASTROSIS)
L18 11 S (AMYLIN?) AND L9
L19 5 DUPLICATE REMOVE L18 (6 DUPLICATES REMOVED)
L20 67 S (AMYLIN?) (2A) (AGONIST#)
L21 0 S L12 AND L20
L22 0 S L9 AND L20
L23 76 S (AMYLIN) (L) (ULCER? OR GASTROSIS OR GASTRITIS OR INFLAMM
L24 5 S L9 AND L23
L25 2 DUPLICATE REMOVE L24 (3 DUPLICATES REMOVED)
L26 79498 S (GASTROSIS OR GASTRITIS) OR (ANTACID?) OR (GASTIC OR ST
L27 3 S L26(L) (AMYLIN? OR AMYLIN AGONIST?)
L28 97980 S (GASTROSIS OR GASTRITIS) OR (ANTACID?) OR (GASTRIC OR S
L29 85 S L28(L) (AMYLIN? OR AMYLIN AGONIST? OR CGRP OR CALCITONI
L30 16 S L28(L) (AMYLIN? OR AMYLIN AGONIST?)
L31 7 DUPLICATE REMOVE L30 (9 DUPLICATES REMOVED)
L32 69 S L29 NOT L30
L33 31 DUPLICATE REMOVE L32 (38 DUPLICATES REMOVED)
L34 680 S (CALCITONIN?) (L) (AMYLIN? OR AMYLIN AGONIST?)
L35 427 S L34 AND (RECEPTOR?)
L36 21 S L35 AND (GASTRIC OR STOMACH OR GASTRITIS OR INFLAMMAT?
L37 9 DUPLICATE REMOVE L36 (12 DUPLICATES REMOVED)

FILE 'WPIDS' ENTERED AT 10:29:48 ON 01 JUN 1998

L38 1 S CN1133718/PN
L39 1 S (GASTRIC MOTILITY) AND (AMYLIN?)

- L37 ANSWER 1 OF 9 CAPLUS COPYRIGHT 1998 ACS DUPLICATE 1
 1997:482927 Document No. 127:171745 Effect of amylin in various experimental models of **gastric** ulcer. Clementi, Giuseppe; Caruso, Antonina; Cutuli, Vincenza Maria Catena; Prato, Agatina; de Bernardis, Ernesto; Amico-Roxas, Matilde (Institute of Pharmacology, University of Catania, School Medicine, Viale Andrea Doria 6, Catania, 95125, Italy). Eur. J. Pharmacol., 332(2), 209-213 (English) 1997. CODEN: EJPHAZ. ISSN: 0014-2999. Publisher: Elsevier.
- AB S.c. administration of **amylin** (20-40 .mu.g/kg) prevented, in a dose-dependent manner, reserpine- and serotonin-induced **gastric** damage, but the anti-ulcer effect was not present when lesions were induced by pylorus ligation. The protective effect of **amylin** was inhibited by pretreatment with capsaicin as well as CGRP-(8-37), a **calcitonin** gene-related peptide (CGRP) and **amylin receptor** antagonist, and was significantly reduced by domperidone, a dopamine D2 **receptor** antagonist, or neostigmine, an inhibitor of acetylcholinesterase. Our data suggest that the gastroprotective activity of **amylin** in some exptl. models of **gastric** ulcers involves capsaicin-sensitive fibers and CGRP **receptors**. Moreover, the peptide interferes, at least in part, with the dopaminergic and parasympathetic systems.
- L37 ANSWER 2 OF 9 CAPLUS COPYRIGHT 1998 ACS DUPLICATE 2
 1997:616430 Document No. 127:288299 Adrenomedullin, **amylin**, **calcitonin** gene-related peptide and their fragments are potent inhibitors of **gastric** acid secretion in rats. Rossowski, Wojciech J.; Jiang, Ning-Yi; Coy, David H. (Peptide Research Laboratories, Department of Medicine, Tulane University School of Medicine, 1430 Tulane Avenue, New Orleans, LA, 70112-2699, USA). Eur. J. Pharmacol., 336(1), 51-63 (English) 1997. CODEN: EJPHAZ. ISSN: 0014-2999. Publisher: Elsevier.
- AB Adrenomedullin, **amylin** and **calcitonin** gene-related peptides (CGRP) share close sequence homol. and have overlapping spectra of biol. activities, particularly with respect to cardiovascular and gastrointestinal functions. Comparisons of the effects of these three peptides on **gastric** acid release have been made by i.v. infusions in conscious rats equipped with **gastric** fistulae. All peptides were extremely potent inhibitors of basal, pentagastrin- and 2-deoxy-D-glucose-stimulated **gastric** acid secretion with IC50 values in the subnanomolar to nanomolar range. These effects were not inhibited by C-terminal extra-cyclic fragments of the peptides which often act as competitive **receptor** antagonists in other biol. systems. At high concns. C-terminal fragments of human adrenomedullin and rat .alpha.-**calcitonin** gene-related peptide displayed some **receptor** agonist activity. Furthermore, the N-terminally situated disulfide-bridged ring fragments, human adrenomedullin-(15-22), rat **amylin**-(1-8) and rat .alpha.-**calcitonin** gene-related peptide-(1-8), retained significant **gastric** acid inhibitory potencies thus suggesting involvement of **receptor**(s) with significantly differing ligand binding profiles than those characterized previously.

L19- ~~ANSWER 1 OF 5~~ CAPLUS COPYRIGHT 1998 ACS

1997:617977 Document No. 127:257644 Combination therapeutic methods employing nitric oxide scavengers and inhibitors of nitric oxide synthase-inducing species, and compositions useful therefor. Lai, Ching-San (Medinox, Inc., USA; Lai, Ching-San). PCT Int. Appl. WO 9732585 A1 970912, 44 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 97-US4131 970305. PRIORITY: US 96-12820 960305.

AB In accordance with the present invention, there are provided combination therapeutic methods for the in vivo inactivation or inhibition of formation (either directly or indirectly) of species which induce the expression of nitric oxide synthase, as well as reducing nitric oxide levels produced as a result of NO synthase expression. In contrast to the inhibitory approach described in the prior art (i.e., wherein the function of the enzymes responsible for nitric oxide prodn. is inhibited), the present invention employs a combination of inactivation (or inhibition) and a scavenging approach whereby the stimulus of nitric oxide synthase expression is inactivated, or the prodn. thereof is inhibited, and overproduced nitric oxide is bound in vivo to a suitable nitric oxide scavenger. The resulting complexes render the stimulus of nitric oxide synthase expression inactive (or inhibit the prodn. thereof), and nitric oxide harmless. The resulting complexes are eventually excreted in the urine of the host. In another aspect, the present invention relates to reducing elevated nitric oxide levels assocd. with infectious and/or inflammatory conditions (and the treatment thereof), employing a combination therapeutic method wherein an agent for the treatment of the infectious and/or inflammatory condition is co-administered along with a dithiocarbamate compd. as a scavenger of overproduced nitric oxide. Further in accordance with the present invention, there are provided compns. and formulations useful for carrying out the above-described methods.

L19 ~~ANSWER 2 OF 5~~ CAPLUS COPYRIGHT 1998 ACS

1997:450109 Document No. 127:60628 Combination therapeutic methods employing nitric oxide scavengers. Lai, Ching-San (Medinox, Inc., USA; Lai, Ching-San). PCT Int. Appl. WO 9718805 A1 970529, 62 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 96-US18124 961112. PRIORITY: US 95-561594 951121.

AB Combination therapeutic methods are provided for the in vivo inactivation or inhibition of formation (either directly or indirectly) of species which induce the expression of nitric oxide synthase, as well as reducing nitric oxide levels produced as a result of NO synthase expression. In contrast to the inhibitory approach described in the prior art (i.e., wherein the function of the enzymes responsible for nitric oxide prodn. is inhibited), the present invention employs a combination of inactivation (or

inhibition) and scavenging approaches, whereby the stimulus of nitric oxide synthase expression is inactivated and the prodn. thereof is inhibited, and overproduced nitric oxide is bound in vivo to a suitable nitric oxide scavenger. The resulting complexes render the stimulus of nitric oxide synthase expression inactive (or inhibit the prodn. thereof), and nitric oxide harmless. The resulting complexes are eventually excreted in the urine of the host. Also provided are compns. and formulations useful for carrying out the above methods.

L19 ANSWER 3 OF 5 CAPLUS COPYRIGHT 1998 ACS DUPLICATE 1

1997:143182 Document No. 126:233867 Protection by **amylin** of gastric erosions induced by **indomethacin** or ethanol in rats. Guidobono, F.; Pagani, F.; Ticozzi, C.; Sibilia, V.; Pecile, A.; Netti, C. (Department of Pharmacology, Chemotherapy and Medical Toxicology, University of Milan, Milan, 20129, Italy). Br. J. Pharmacol., 120(4), 581-586 (English) 1997. CODEN: BJPCBM. ISSN: 0007-1188. Publisher: Stockton.

AB The effect of **amylin** on gastric ulcers induced by oral administration of **indomethacin** (Indo, 20 mg kg⁻¹ at a dosing vol. of 5 mL) or ethanol 50% (EtOH, 1 mL/rat) was investigated in conscious rats. **Amylin** given intracerebroventricularly (0.22, 0.66 and 2.2 .mu.g/rat, i.c.v.) demonstrated a dose-dependent cytoprotective effect against both Indo and EtOH-induced ulcers. In contrast, **amylin**, given s.c. at doses effective in inhibiting acid gastric secretion (2.5, 10 and 40 .mu.g kg⁻¹, s.c.), did not show any cytoprotective effect. The interaction between **amylin** and endogenous nitric oxide (NO) in the maintenance of gastric mucosal integrity was investigated by pretreating the rats with a selective inhibitor of NO-synthesis, NG-nitro-L-arginine Me ester (L-NAME, 25 and 70 mg kg⁻¹, s.c.). Administration of L-NAME to rats did not significantly increase the degree of the Indo-induced ulcer index and was not able to remove the protective effect of **amylin** on Indo-induced ulcers, thus excluding a role for endogenous NO in mediating the protective effect of this peptide. To det. whether the cytoprotective effect of **amylin** was mediated by endogenous prostaglandins, the authors studied the effect of **amylin** (2.2 .mu.g/rat, i.c.v.) on EtOH- induced ulcers in rats pretreated with Indo (10 mg kg⁻¹, s.c.) to inhibit prostanoid biosynthesis; Indo was injected 30 min before **amylin** and EtOH after a further 30 min. Pretreatment with Indo did not significantly increase the ulcer index induced by EtOH but counteracted the ability of **amylin** to prevent the ulcer formation. Apparently, **amylin** exerts a gastroprotective activity that is not strictly related to inhibition of acid gastric secretion and can be partly explained through a prostaglandin-dependent mechanism mediated by receptors for the peptide in the brain. **Amylin** might be considered as a new brain-gut peptide.

L19 ANSWER 4 OF 5 BIOSIS COPYRIGHT 1998 BIOSIS

96:350773 Document No.: 99073129. Effect of **amylin** on gastric acid secretion and gastric ulcers in the rat.. Guidobono F; Pagani F; Ticozzi C; Sibilia V; Netti C. Dep. Pharmacol. Chemotherapy Med. Toxicol., Via Vanvitelli 32, 20129 Milan, Italy FundamentaI & Clinical Pharmacology3rd Joint Meeting of the Societa Italiana di Farmacologia and the French Association des Pharmacologues, Capri, Italy, May 23-26, 1996., 10 (2). 1996. 196. ISSN: 0767-3981. Language: English

AN 96:350773 BIOSIS

L19 ANSWER 5 OF 5 CAPLUS COPYRIGHT 1998 ACS DUPLICATE 2

1995:838181 Document No. 123:218883 Effects of adrenomedullin, calcitonin gene-related peptide, and **amylin** on cerebral circulation in dogs. Baskaya, Mustafa K.; Suzuki, Yoshio; Anzai, Masaoki; Seki, Yukio; Saito, Kiyoshi; Takayasu, Masakazu; Shibuya,

✓
L25 ANSWER 1 OF 2 CAPLUS COPYRIGHT 1998 ACS DUPLICATE 1
AN 1997:143182 CAPLUS
DN 126:233867
TI Protection by amylin of gastric erosions induced by
indomethacin or ethanol in rats
AU Guidobono, F.; Pagani, F.; Ticozzi, C.; Sibilia, V.; Pecile, A.;
Netti, G.
CS Department of Pharmacology, Chemotherapy and Medical Toxicology,
University of Milan, Milan, 20129, Italy
SO Br. J. Pharmacol. (1997), 120(4), 581-586
CODEN: BJPCBM; ISSN: 0007-1188
PB Stockton
DT Journal
LA English

L25 ANSWER 2 OF 2 BIOSIS COPYRIGHT 1998 BIOSIS
AN 96:350773 BIOSIS
DN 99073129
TI Effect of **amylin** on gastric acid secretion and gastric
ulcers in the rat.
AU Guidobono F; Pagani F; Ticozzi C; Sibilia V; Netti C
CS Dep. Pharmacol. Chemotherapy Med. Toxicol., Via Vanvitelli 32, 20129
Milan, Italy
SO 3rd Joint Meeting of the Societa Italiana di Farmacologia and the
French Association des Pharmacologistes, Capri, Italy, May 23-26,
1996. Fundamental & Clinical Pharmacology 10 (2). 1996. 196. ISSN:
0767-3981
DT Conference
LA English

L31 ANSWER 1 OF 7 CAPLUS COPYRIGHT 1998 ACS DUPLICATE 1
AN 1997:143182 CAPLUS
DN 126:233867
TI Protection by amylin of gastric erosions induced by indomethacin or ethanol in rats
AU Guidobono, F.; Pagani, F.; Ticozzi, C.; Sibilia, V.; Pecile, A.; Netti, C.
CS Department of Pharmacology, Chemotherapy and Medical Toxicology, University of Milan, Milan, 20129, Italy
SO Br. J. Pharmacol. (1997), 120(4), 581-586
CODEN: BJPCBM; ISSN: 0007-1188
PB Stockton
DT Journal
LA English

L31 ANSWER 2 OF 7 BIOSIS COPYRIGHT 1998 BIOSIS
AN 97:371458 BIOSIS
DN 99670661
TI Amylin inhibits pentagastrin-stimulated gastric acid secretion and protects against ethanol-induced gastric mucosal damage in rats.
AU Gedulin B R; Lawler R L; Jodka C M; Grazzini M L; Young A A
CS Amylin Pharm. Inc., San Diego, CA, USA
SO 16th International Diabetes Federation Congress, Helsinki, Finland, July 20-25, 1997. Diabetologia 40 (SUPPL. 1). 1997. A299. ISSN: 0012-186X
DT Conference
LA English

L31 ANSWER 3 OF 7 CAPLUS COPYRIGHT 1998 ACS DUPLICATE 2
AN 1997:482927 CAPLUS
DN 127:171745
TI Effect of amylin in various experimental models of gastric ulcer
AU Clementi, Giuseppe; Caruso, Antonina; Cutuli, Vincenza Maria Catena; Prato, Agatina; de Bernardis, Ernesto; Amico-Roxas, Matilde
CS Institute of Pharmacology, University of Catania, School Medicine, Viale Andrea Doria 6, Catania, 95125, Italy
SO Eur. J. Pharmacol. (1997), 332(2), 209-213
CODEN: EJPHAZ; ISSN: 0014-2999
PB Elsevier
DT Journal
LA English

L31 ANSWER 4 OF 7 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 98-019088 [03] WPIDS
DNC C98-007168
TI Treatment of gastrosis.
DC B04
IN LIU, W; SHAO, Z; ZHANG, L
PA (SHIY-N) SHIYITANG PHARM PLANT HARBIN
CYC 1
PI CN 1133718 A 961023 (9803)* A61K035-78
ADT CN 1133718 A CN 95-109026 950721
PRAI CN 95-109026 950721
IC ICM A61K035-78
ICS A61K009-16

L31 ANSWER 5 OF 7 BIOSIS COPYRIGHT 1998 BIOSIS
AN 96:350773 BIOSIS

DN 99073129

TI Effect of amyl. on gastric acid secretion and
gastric ulcers in the rat.

AU Guidobono F; Pagani F; Ticozzi C; Sibilia V; Netti C

CS Dep. Pharmacol. Chemotherapy Med. Toxicol., Via Vanvitelli 32, 20129
Milan, Italy

SO 3rd Joint Meeting of the Societa Italiana di Farmacologia and the
French Association des Pharmacologues, Capri, Italy, May 23-26,
1996. Fundamental & Clinical Pharmacology 10 (2). 1996. 196. ISSN:
0767-3981

DT Conference

LA English

L31 ANSWER 6 OF 7 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

AN 95-351860 [46] WPIDS

DNC C95-154125

TI Chinese medicine for treatment of gastric and duodenal ulcers.

DC B04

IN WU, W; YANG, F

PA (YONG-N) YONGNING PHARM FACTORY ZHEJIANG

CYC 1

PI CN 1095284 A 941123 (9546)*

A61K035-78

ADT CN 1095284 A CN 93-106068 930515

PRAI CN 93-106068 930515

IC ICM A61K035-78

L31 ANSWER 7 OF 7 CAPLUS COPYRIGHT 1998 ACS

DUPLICATE 3

AN 1992:188371 CAPLUS

DN 116:188371

TI Stimulatory effects of islet amyloid polypeptide (amylin) on
exocrine pancreas and gastrin release in conscious rats

AU Funakoshi, Akihiro; Miyasaka, Kyoko; Kitani, Kenichi; Nakamura,
Junko; Funakoshi, Susumu; Fukuda, Hiroyuki; Fujii, Nobutaka

CS Natl. Kyushu Cancer Cent., Fukuoka, 815, Japan

SO Regul. Pept. (1992), 38(2), 135-43

CODEN: REPPDY; ISSN: 0167-0115

DT Journal

LA English

L33 ANSWER 1 OF 31 CAPLUS COPYRIGHT 1998 ACS DUPLICATE 1
1998:45946 Document No. 128:136717 Calcitonin gene-related peptide
affords gastric mucosal protection by activating potassium channel
in Wistar rat. Doi, Kosei; Nagao, Tetsuhiko; Kawakubo, Keishi;
Ibayashi, Setsuro; Aoyagi, Kunihiro; Yano, Yuji; Yamamoto, Chifumi;
Kanamoto, Kohki; Iida, Mitsuo; Sadoshima, Seizo; Fujishima,
Masatoshi (Second Dep. Internal Med., Fac. Med., Kyushu Univ.,
Fukuoka, Japan). Gastroenterology, 114(1), 71-76 (English) 1998.
CODEN: GASTAB. ISSN: 0016-5085. Publisher: W. B. Saunders Co..

AB **Calcitonin gene-related**

peptide (CGRP) protects the gastric mucosa against
injurious stimuli in various expt. models. The underlying mechanism
could be the increase in gastric mucosal blood flow (GMBF). A no.
of endogenous vasodilators exert their effects through the
activation of ATP-sensitive potassium (KATP) channels on vascular
smooth muscle. The present expts. were performed to elucidate
whether **CGRP** increases GMBF through the activation of KATP
channels and whether the channels are involved in the protection by
CGRP of gastric mucosa. GMBF was detd. by the
hydrogen-clearance technique in male Wistar rats. Mucosal lesions
were produced by intragastric superfusion with 0.15N HCl and 15%
ethanol for 40 min. Effects of an agonist (Y-26763,
intra-arterially) and an inhibitor (glibenclamide, i.v.) of KATP
channels were tested. Y-26763 increased GMBF, which was abolished
by glibenclamide, and a **CGRP**-induced increase in GMBF was
attenuated by glibenclamide. Macroscopic and microscopic lesions
were exacerbated by human **CGRP**-(8-37) (a **CGRP**-1
receptor antagonist; intra-arterially) and glibenclamide but were
ameliorated by exogenous **CGRP** (intra-arterially).
CGRP protects the **gastric** mucosa against
ulcerogenic stimuli, at least in part, through the
activation of KATP channels in rats.

L33 ANSWER 3 OF 31 CAPLUS COPYRIGHT 1998 ACS DUPLICATE 2
1997:568251 Document No. 127:232915 A protective role for

calcitonin gene-related peptide
in water-immersion stress-induced **gastric ulcers**
in rats. Evangelista, Stefano; Renzi, Daniela (Pharmacology Dept.,
Istituto Farmacobiologico Malesci S.p.A., Florence, 50144, Italy).
Pharmacol. Res., 35(4), 347-350 (English) 1997. CODEN: PHMREP.
ISSN: 1043-6618. Publisher: Academic.

AB This study investigated the role of endogenous and exogenous

calcitonin gene-related peptide
(**CGRP**) in water immersion stress (WIS)-induced
gastric ulcers in rats. WIS produced
gastric ulcers which were inversely correlated to
the decrease in **CGRP**-like immunoreactivity obsd. in the
whole thickness of the corpus stomach but not in its mucosal layers.
Systemic administration of **CGRP** (100 .mu.g kg-1 s.c.)
produced a significant decrease in lesion index of WIS-ulcers and
this protection was inhibited by functional ablation of afferent
neurons induced by capsaicin pretreatment (100 mg kg-1 s.c. in two
days, a week before the expts.). These findings suggest that
sensory endogenous **CGRP** plays a defensive role in
WIS-ulcers.

L33 ANSWER 14 OF 31 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V. DUPLICATE
9
94035253 EMBASE A role for **calcitonin gene-**

related peptide in protection against **gastric ulceration**. Gray J.L.; Bunnett N.W.; Orloff S.L.; Mulvihill S.J.; Debas H.T.. Department of Surgery, University of California, 533 Parnassus Avenue, San Francisco, CA 94143-0788, United States. ANN. SURG. 219/1 (58-64) 1994. ISSN: 0003-4932. CODEN: ANSUA5. Pub. Country: United States. Language: English. Summary Language: English.

AB Objective: The goal of this investigation was to determine the role of **calcitonin gene-related peptide (CGRP)** in gastric mucosal resistance to ulceration. Summary Background Data: **CGRP** is a 37-amino acid peptide found in the peripheral ends of afferent gastric neurons. **CGRP** is known to inhibit acid secretion, stimulate mucosal blood flow, and stimulate release of somatostatin. Methods: The release of **CGRP** in response to intragastric and intra-arterial administration of capsaicin in the isolated, vascularly perfused rat stomach was measured by radioimmunoassay. The molecular forms of **CGRP** released were analyzed by gel filtration chromatography. The effect of intravenous **CGRP** or intragastric capsaicin on **gastric ulceration** induced by 100 mmol/L HCl and indomethacin was studied in intact and endogenous **CGRP**-depleted rats. Results: Intra-arterial capsaicin (concentration range, 10^{-7} to 10^{-5} mol/L) stimulated a prompt and sustained release of immunoreactive **CGRP**, of which 84% coeluted with rat 1-37 **CGRP** I by gel filtration. Intragastric capsaicin (range, 10^{-5} to 10^{-4} mol/L) failed to release **CGRP** into the vascular perfusate. In intact rats, intragastric capsaicin (10^{-6} mol/L) or intravenous **CGRP** I ($10 \mu\text{g/kg/hr}$) reduced the number and area of mucosal lesions caused by HCl and indomethacin compared with the findings in control rats. Rats depleted of endogenous **CGRP** were more susceptible to **gastric ulceration** than were normal rats. Intragastric capsaicin failed to protect the mucosa of **CGRP**-depleted rats, whereas exogenous intravenous **CGRP** was effective. Conclusions: These data support the hypothesis that **CGRP** released from gastric enteric neurons mediates gastric mucosal resistance to ulceration by noxious agents.

L33 ANSWER 18 OF 31 CAPLUS COPYRIGHT 1998 ACS
1992:76831 Document No. 116:76831 Pharmacological evidence for the involvement of multiple calcitonin gene-related peptide (CGRP) receptors in the antisecretory and antiulcer effect of CGRP in rat stomach. Evangelista, Stefano; Tramontana, Manuela; Maggi, Carlo Alberto (Pharmacol. Dep., Melesci Pharm., Florence, Italy). Life Sci., 50(5), PL13-PL18 (English) 1992. CODEN: LIFSAK. ISSN: 0024-3205.

AB The effects of the C-terminal fragment of human **calcitonin gene-related peptide** (human-CGRP8-37), a **CGRP** antagonist, on α -**CGRP**- and salmon calcitonin (sCT)-induced inhibition of gastric acid secretion stimulated by pentagastrin (24 nmol/kg/h, i.v.) and gastric lesions induced by acetylsalicylic acid (ASA) (25 mM) were studied in rats anesthetized with urethane. Close intraarterial (i.a.) infusion of α -**CGRP** (2-5 nmol/kg) and sCT (5 nmol/kg) produced a redn. in **gastric acid hypersecretion** induced by pentagastrin. The concomitant infusion with human-CGRP8-37 (10 nmol/kg) reversed the effect of both agonists. ASA-induced ulcers were reduced in a dose-dependent manner by infusion of α -**CGRP** (1-2 nmol/kg, i.a.), but not by sCT (10 nmol/kg, i.a.). Human-CGRP8-37 at a dose of 10 nmol/kg i.a. was unable to reverse the α -**CGRP** antiulcer effect. A higher dose of human-CGRP8-37 (50 nmol/kg, i.a.) showed agonistic properties reducing ASA ulcers. Apparently, the inhibitory effects of α -**CGRP** on stimulated acid secretion and ASA ulcers are mediated by different mechanisms and(or) different receptors.

L33 ANSWER 21 OF 35 CAPLUS COPYRIGHT 1998 ACS
1992:253350 Document No. 116:253350 Cysteamine induced duodenal ulcers are associated with a selective depletion in gastric and duodenal calcitonin gene-related peptide-like immunoreactivity in rats. Evangelista, Stefano; Renzi, Daniela; Tramontana, Manuela; Surrenti, Calogero; Theodorsson, Elvar; Maggi, Carlo Alberto (Pharmacol. Dep., Malesci Pharm., Florence, 50144, Italy). Regul. Pept., 39(1), 19-28 (English) 1992. CODEN: REPPDY. ISSN: 0167-0115.

AB The authors measured the endogenous levels of gastric and duodenal calcitonin gene-related peptide (CGRP)-, neurokinin A (NKA)-, galanin-vasoactive intestinal polypeptide (VIP)- and neuropeptide Y (NPY)-like immunoreactivity (li) in relation to cysteamine-induced gastric lesions and duodenal ulcers in rats. CGRP-li but not NKA-, galanin-, VIP- or NPY-li was decreased in gastric and duodenal samples following a single ulcerogenic dose of cysteamine (900 mg/kg p.o.). Temporal relationships of this phenomenon showed that CGRP-li was selectively decreased (stomach 45%, duodenum 68% as compared to controls after 24 h) concomitantly to the formation of acute gastric lesions and duodenal ulcers. Animals bearing healed ulcers 12 days after cysteamine, had gastroduodenal CGRP-li similar to control values. Pretreatment with the selective sensory neurotoxin capsaicin decreased gastroduodenal CGRP-li but not NKA-, galanin-, VIP- or NPY-li, showing that CGRP might be considered a marker of the afferent innervation of the gastroduodenal tract. The residual gastroduodenal CGRP-li levels in capsaicin-pretreated animals were not decreased by cysteamine administration, indicating that the effect of cysteamine is restricted to a peptide pool of primary afferent origin. Duodenal CGRP-li is selectively decreased by the duodenal ulcerogen cysteamine during the acute phase of ulcer formation and might be among the local mediators which afford protection against the ulcerogenic stimuli.

L33 ANSWER 23 OF 31 EMBASE COPYRIGHT 1998 ELSEVIER SCI. B.V.
92028367 EMBASE Pharmacological evidence for the involvement of multiple calcitonin gene-related peptide (CGRP) receptors in the antisecretory and antiulcer effect of CGRP in rat stomach. Evangelista S.; Tramontana M.; Maggi C.A.. Ist. Farmacobiologico Malesci S.p.A., Pharmacology Dept., Via Porpora 22, 50144 Firenze, Italy. LIFE SCI. 50/5 (PL13-PL18) 1992. ISSN: 0024-3205. CODEN: LIFSAK. Pub. Country: United States. Language: English. Summary Language: English.

AB We have investigated the effect of the C-terminal fragment of human **calcitonin gene-related peptide** (human-CGRP8-37), a **CGRP** antagonist, on alpha-CGRP and salmon Calcitonin (sCT)-induced inhibition of gastric acid secretion stimulated by pentagastrin (24 nmol kg⁻¹ h⁻¹ i.v.) and gastric lesions induced by acetylsalicylic acid (ASA; 25 mM) in rats anaesthetized with urethane. Close intra arterial infusion of alpha-CGRP (2-5 nmol kg⁻¹) and sCT (5 nmol kg⁻¹) produced a reduction in **gastric acid hypersecretion** induced by pentagastrin. The concomitant infusion with human-CGRP8-37 (10 nmol kg⁻¹) reversed the effect of both agonists. ASA-ulcers were reduced in a dose-dependent manner by infusion of alpha-CGRP (1-2 nmol kg⁻¹ i.a.), but not by sCT (10 nmol kg⁻¹ i.a.). Human-CGRP8-37 at a dose of 10 nmol kg⁻¹ i.a. was unable to reverse the alpha-CGRP antiulcer effect. A higher dose of human-CGRP8-37 (50 nmol kg⁻¹ i.a.) showed agonistic properties reducing ASA ulcers. These results suggest that the inhibitory effects of alpha-CGRP on stimulated acid secretion and aspirin ulcers are mediated by different mechanisms and/or different receptors.

L33 ANSWER 28 OF 31 BIOSIS COPYRIGHT 1998 BIOSIS
89:349487 Document No.: BR37:40584. INTRACISTERNAL ALPHA-CGRP PREVENTS **GASTRIC ULCER** FORMATION IN THE RAT. KOLVE E; TACHE Y. CURE/VA WADSWORTH MED. CENT., DEP. MED., LOS

ANGELES, CALIF. 90073, USA. 90TH ANNUAL MEETING OF THE AMERICAN
GASTROENTEROLOGICAL ASSOCIATION, WASHINGTON, D. USA, MAY 13-19,
1989. GASTROENTEROLOGY, 96 (5 PART 2). 1989. A266. CODEN: GASTAB;
ISSN: 0016-5085. Language: English

AN 89:349487 BIOSIS

L33 ANSWER 31 OF 31 CAPLUS COPYRIGHT 1998 ACS

1987:79162 Document No. 106:79162 Antiulcer activity of calcitonin
gene-related peptide in rats. Maggi, C. A.; Evangelista, S.;
Giuliani, S.; Meli, A. (Pharmacol. Dep., A. Menarini Pharm.,
Firenze, 50131, Italy). Gen. Pharmacol., 18(1), 33-4 (English)
1987. CODEN: GEPHDP. ISSN: 0306-3623.

AB **Calcitonin gene-related**

peptide (CGRP) [83652-28-2] (5-10 .mu.g/kg, s.c.)

reduced both incidence and degree of indomethacin- or
acetylsalicylic acid plus HCl-induced **gastric**

ulcers, as well as of cysteamine-induced duodenal ulcers in
rats. **CGRP** had no effect on EtOH-induced gastric lesions.

The anti-ulcer activity of **CGRP** is most likely ascribable
to its potent antisecretory properties.

Masato; Sugita, Kenichiro (School of Medicine, Nagoya University,
Nagoya, Japan) J. Cereb. Blood Flow Metab., Volume Date 1995,
15(5), 827-34 (English) 1995. CODEN: JCBMDN. ISSN: 0271-678X.

AB

The effect of human adrenomedullin on cerebral circulation was investigated in dogs in vivo and in vitro. Bolus administration of adrenomedullin or its homologous peptides, calcitonin gene-related peptide (CGRP) and **amylin**, into the vertebral artery induced a dose-dependent increase in vertebral blood flow. The potencies of adrenomedullin and CGRP were similar and approx. 100 times more than that of **amylin**. The effects of adrenomedullin and CGRP were inhibited by CGRP8-37, an antagonist of CGRP. In contrast to substance P, adrenomedullin did not induce an increase in blood flow after prior administration of CGRP. Pretreatment with either NG-nitro-L-arginine Me ester or **indomethacin** did not affect the adrenomedullin-induced increase in blood flow. Intracisternal administration of adrenomedullin induced dilation of the basilar and other major cerebral arteries in a dose-dependent manner, accompanied by an increase in the concn. of cAMP in the cerebrospinal fluid. Adrenomedullin also induced relaxation of isolated basilar and middle cerebral arterial rings. These data suggest that adrenomedullin induces vasodilation of cerebral arteries and an increase in vertebral blood by acting at CGRP receptors pos. coupled to adenylate cyclase, and that these effects are not dependent on nitric oxide or prostaglandin formation.

L39 ANSWER 1 OF 1 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
 AN 95-123240 [16] WPIDS
 DNC C95-056209
 TI Treating gastrointestinal motility - using **amylin**,
amylin agonists or **amylin** antagonists.
 DC B04
 IN BROWN, K K; KOLTERMAN, O G; RINK, T J; YOUNG, A A; RINK, T I; YONG,
 A A; BROWN, K
 PA (AMYL-N) AMYLIN PHARM INC
 CYC 57
 PI WO 9507098 A1 950316 (9516)* EN 90 pp A61K038-22
 RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE
 W: AM AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KE
 KG KP KR KZ LK LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD
 SE SI SK TJ TT UA UZ VN
 AU 9476858 A 950327 (9528) A61K038-22
 ZA 9406881 A 951227 (9605) 58 pp A61K000-00
 BR 9407424 A 960409 (9621) A61K038-22
 NO 9600899 A 960506 (9628) A61K038-22
 EP 717635 A1 960626 (9630) EN A61K038-22
 R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
 HU 73490 T 960828 (9647) A61K038-22
 JP 09502443 W 970311 (9720) 71 pp A61K038-22
 CZ 9600695 A3 970611 (9730) A61K038-22
 CN 1134110 A 961023 (9803) A61K038-22
 BR 1100172 A3 980414 (9821) A61K038-22
 ADT WO 9507098 A1 WO 94-US10225 940907; AU 9476858 A AU 94-76858 940907;
 ZA 9406881 A ZA 94-6881 940907; BR 9407424 A BR 94-7424 940907, WO
 94-US10225 940907; NO 9600899 A WO 94-US10225 940907, NO 96-899
 960306; EP 717635 A1 EP 94-927398 940907, WO 94-US10225 940907; HU
 73490 T WO 94-US10225 940907, HU 96-558 940907; JP 09502443 W WO
 94-US10225 940907, JP 95-508823 940907; CZ 9600695 A3 WO 94-US10225
 940907, CZ 96-695 940907; CN 1134110 A CN 94-193931 940907; BR
 1100172 A3 BR 97-1100172 970317
 FDT AU 9476858 A Based on WO 9507098; BR 9407424 A Based on WO 9507098;
 EP 717635 A1 Based on WO 9507098; HU 73490 T Based on WO 9507098; JP
 09502443 W Based on WO 9507098; CZ 9600695 A3 Based on WO 9507098
 PRAI US 93-118381 930907
 IC ICM A61K000-00; A61K038-22
 ICS A61K035-39; A61K038-23; A61K049-00; G01N000-00

=> d ab

L39 ANSWER 1 OF 1 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
 AB WO 9507098 A UPAB: 950502
 An **amylin** or an **amylin** agonist or **amylin**
 agonist analogue is administered to beneficially regulate
 gastrointestinal motility, to treat post-prandial dumping syndrome
 or to treat post-prandial hyperglycaemia.
 An **amylin** antagonist is administered to treat gastric
 hypomotility or to accelerate gastric emptying.
 USE - The **amylin** or agonist or analogue may be used
 to reduce **gastric motility** or to delay gastric
 emptying e.g. in a subject undergoing a gastrointestinal diagnostic
 procedure such as a radiological examination or magnetic resonance
 imaging. The **gastric motility** may be associated
 with a gastrointestinal disorder such as spasm, e.g. spasm

associated with a disorder selected from acute diverticulitis or a disorder of the biliary tract or a disorder of the Sphincter of Oddi. The postprandial hyperglycaemia may be a consequence of type 2 diabetes mellitus.

The **amylin** may also be used to treat ingestion of a toxin by administering an amount effective to prevent or reduce the passage of stomach contents to the intestines then aspirating the stomach contents.

The hypomotility for which the antagonist is used may be a consequence of diabetic neuropathy or anorexia nervosa.

Effective daily anti-emptying doses of cpds. such as 18Arg25

28Pro-L-**amylin**, des-1Lys18Arg25 28Pro-L-**amylin**,

18Arg25 28 29Pro-L-**amylin**, des-1Lys18Arg-25 28 29Pro-L-

amylin, 25 28 29Pro-L-**amylin**, des-1Lys25 28

29Pro-L-**amylin** and 25Pro26Val25 28Pro-L-**amylin**

are typically in the range 0.01 or 0.03 to 5 mg/day, most pref. 0.01 or 0.1 to 1 mg/day for a 70 kg patient, administered in a single or divided doses.

Administration may be by injection, pref. s.c. or i.m. Oral administration, increasing dosages 5-10 fold, may also be used.

Amylin antagonists may be administered in a dosage of 0.1-30 mg/day, most pref. 0.1-3 mg/day by injection, or orally with a 5-10 fold dosage increase.

Dwg.0/17

L38 ANSWER 1 OF 1 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 98-019088 [03] WPIDS
DNC C98-007168
TI Treatment of gastrosis.
DC B04
IN LIU, W; SHAO, Z; ZHANG, L
PA (SHIY-N) SHIYITANG PHARM PLANT HARBIN
CYC 1
PI CN 1133718 A 961023 (9803)* A61K035-78 <--
ADT CN 1133718 A CN 95-109026 950721
PRAI CN 95-109026 950721
IC ICM A61K035-78
ICS A61K009-16
AB CN 1133718 A UPAB: 980209
Chinese patent medicine for curing gastrosis e.g. atrophic
gastritis, surficial gastritis and gastric ulcer with 90 % total
effective rate, 50 % cure rate and no toxic side effects is prepared
from 13 Chinese-medicinal materials e.g. astragalus root and white
peony root by proportioning, breaking, decocting, concentrating,
purifying, concentrating again, mixing with cane sugar and amylin,
granulating, drying and packaging.
Dwg.0/0
FS CPI
FA AB
MC CPI: B04-A10; B14-E08; B14-E10B

L14 ANSWER 1 OF 1 BIOSIS COPYRIGHT 1998 BIOSIS

97:371458 Document No.: 99670661. **Amylin** inhibits

pentagastrin-stimulated gastric acid secretion and protects against ethanol-induced gastric mucosal damage in rats.. **Gedulin B R**

; Lawler R L; Jodka C M; Grazzini M L; **Young A A**. Amylin

Pharm. Inc., San Diego, CA, USA Diabetologia16th International

Diabetes Federation Congress, Helsinki, Finland, July 20-25, 1997.,

40 (SUPPL. 1). 1997. A299. ISSN: 0012-186X. Language: English

AN 97:371458 BIOSIS

TI **Amylin** inhibits pentagastrin-stimulated gastric acid

secretion and protects against ethanol-induced gastric mucosal damage in rats.

AU **Gedulin B R**; Lawler R L; Jodka C M; Grazzini M L;

Young A A

ST MEETING ABSTRACT; MEETING POSTER; SPRAGUE-DAWLEY RAT; ANIMAL MODEL;

AMYLIN; ENDOGENOUS; GASTROPROTECTIVE EFFECTS; GASTRIC ACID;

DIGESTIVE SYSTEM; ENDOCRINE SYSTEM; **GASTRITIS**; SECRETION;

DIGESTIVE SYSTEM; DIGESTIVE SYSTEM DISEASE

L3 ANSWER 9 OF 9 CAPLUS COPYRIGHT 1998 ACS

1990:191966 Document No. 112:191966 Treatment of type 2 diabetes mellitus. Cooper, Garth James Smith; Greene, Howard E. (Amylin Corp., USA). PCT Int. Appl. WO 8906135 A1 890713, 50 pp. DESIGNATED STATES: W: AU, DK, FI, JP, NO, US; RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE. (English). CODEN: PIXXD2. APPLICATION: WO 89-US49 890111. PRIORITY: US 88-142447 880111.

AB Compds. and methods are described for blocking the effects of diabetes-assocd. peptide, or amylin, a hormone found in the amyloid masses of Type 2 diabetics. Also disclosed are methods of identifying addnl. compds. having utility for the treatment of Type 2 diabetes. This putative hormone has been discovered to function both to inhibit insulin secretion and to inhibit glycogen synthesis. Regulation is accomplished by blocking the binding of amylin or **amylin agonists**, including **calcitonin gene related peptide (CGRP)**, or biol. active sub-peptides thereof. Inhibitors include substituted peptides or sub-peptides of amylin or **CGRP**, cross-linked amylin and **amylin agonists**, synthetic amylin, anti-amylin receptor antibodies and anti-idiotypic antibodies, and antibodies directed to amylin and **amylin agonist** active sites. Other antagonists include org. compds. which can be screened and assayed for anti-amylin effects by disclosed methods.

08/851,965

(FILE 'USPAT' ENTERED AT 08:41:10 ON 01 JUN 1998)

L1 E YOUNG, A ?/IN
9 S E35-E36
E BRONISLAVA, G ?/IN
E BEYNON, G ?/IN
L2 1345 S (GASTRI####)/CLM
L3 32 S (AMYLIN?)/CLM
L4 3 S L2 AND L3
L5 1101 S (GASTRITIS)
L6 86 S (AMYLIN?)
L7 0 S L5(L)L6
L8 0 S L5 AND L6
L9 22 S (AMYLIN) (2A) (AGONIST?)
L10 0 S L5 AND L9
L11 24385 S (INFLAMMAT?)
L12 31 S L6(L)L11
L13 2 S L9(L)L11
L14 31 S L6(L)L11
L15 29 S L14 NOT L13
L16 197 S (CALCITONIN GENE RELATED PEPTID?) OR (CGRP)
L17 10 S L5 AND L16
L18 10 S L5(L)L16
L19 0 S L5(P)L16
L20 14 S L6(2P)L11
L21 13 S L20 NOT L13
L22 1010 S (NSAID?)
L23 2926 S (NONSTEROIDAL OR NON-STEROIDAL) (2A) (ANTI-INFLAMMAT? OR A
NTI
L24 9469 S (SALICYCLATE? OR ASPIRIN? OR IBUPROFEN? OR IBUPROPHEN? O
R P
L25 2037 S (PHENACETIN? OR NAPROXEN?)
L26 10687 S L22 OR L23 OR L24 OR L25
L27 14 S L6 AND L26
L28 5 S L9 AND L26
L29 5 S L27 AND L28
L30 9 S L27 NOT L28
L31 1 S (L6 OR L9) (2P) (L26)
L32 2162 S (GASTRITIS)OR (GASTRIC OR STOMACH) (2A) (INFLAMMAT? OR UPS
ET
L33 749 S L26 AND L32
L34 234 S L26(P)L32
L35 32 S L3 OR L9
L36 0 S L34 AND L35
L37 0 S L32 AND L35
L38 163 S (GASTRITIS)/CLM OR (GASTRIC OR STOMACH) (2A) (INFLAMMAT? O
R U
L39 42 S L26 AND L38
L40 3958 S (GASTRIC OR STOMACH OR DUODENAL) (2A) (ULCER?) OR (ANTACID
?)
L41 5209 S L32 OR L40
L42 0 S L35 AND L41

FILE 'EPOABS' ENTERED AT 09:25:12 ON 01 JUN 1998

L43 0 S L35 AND L41
L44 0 S L26 AND L35

FILE 'JPOABS' ENTERED AT 09:25:59 ON 01 JUN 1998

L45 0 S L43
L46 0 S L44

FILE 'USPAT' [REDACTED] ERED AT 09:26:47 ON 01 JUN 19[REDACTED]

L47

854 S [REDACTED]ASTRIC OR STOMACH) (2A) (EMPTY?)

L48

2 S L35 AND L47

1. 5,677,279, Oct. 14, 1997, Methods and compositions for treating pain with amylin or agonists thereof; Andrew A. Young, 514/12 [IMAGE AVAILABLE]

2. 5,656,590, Aug. 12, 1997, Treatment of anorexia and related states; Timothy J. Rink, et al., 514/3, 4, 12; 530/303 [IMAGE AVAILABLE]

1. 5,739,106, Apr. 14, 1998, Appetite regulating compositions; Timothy J. Rink, et al., 514/12, 16, 18, 19; 530/303, 307, 312, 324, 328, 331 [IMAGE AVAILABLE]
2. 5,677,279, Oct. 14, 1997, Methods and compositions for treating pain with amylin or agonists thereof; **Andrew A. Young**, 514/12 [IMAGE AVAILABLE]
3. 5,656,590, Aug. 12, 1997, Treatment of anorexia and related states; Timothy J. Rink, et al., 514/3, 4, 12; 530/303 [IMAGE AVAILABLE]
4. 5,527,771, Jun. 18, 1996, Methods and Compositions for treatment of diabetes mellitus, hypoglycemia & other conditions; Kevin Beaumont, et al., 514/12; 530/307, 308 [IMAGE AVAILABLE]
5. 5,508,260, Apr. 16, 1996, Methods and compositions for treatment of diabetes mellitus, hypoglycemia, and other conditions; Kevin Beaumont, et al., 514/4; 530/303, 307 [IMAGE AVAILABLE]
6. 5,376,638, Dec. 27, 1994, Methods for treating renin-related disorders with amylin antagonists; **Andrew A. Young**, et al., 514/12, 11, 13 [IMAGE AVAILABLE]
7. 5,321,008, Jun. 14, 1994, Methods and compositions for treatment of diabetes mellitus, hypoglycemia, and other conditions; Kevin Beaumont, et al., 514/4, 12, 21 [IMAGE AVAILABLE]
8. 5,234,906, Aug. 10, 1993, Hyperglycemic compositions; **Andrew Young**, et al., 514/12, 21 [IMAGE AVAILABLE]
9. 4,243,131, Jan. 6, 1981, Conveying apparatus; **Andrew Young**, 193/35MD; 198/785 [IMAGE AVAILABLE]

33. 4,528,193, Jul. 9, 1985, Inflammation-preventing pharmaceutical composition of oral administration; Miklos Ghyczy, et al., 514/78 [IMAGE AVAILABLE]

CLAIMS:

CLMS(1)

What is claimed is:

1. A process for the treatment of one or more of gastroesophageal reflux disease, undue gastric acid secretion, dyspepsia, **gastritis** and peptic ulcer comprising orally administering a beta adrenergic agonist in an amount effective to provide to the gastric mucosal cells at least one of cytoprotection and anti secretory effect, the beta adrenergic agonist being selected from the group consisting of isoproterenol, metaproterenol, terbutaline, albuterol, fenoterol, bitolterol, isoetharine, colterol, ritodrine, and their pharmaceutically acceptable salts.

CLMS(2)

2. The process of claim 1 wherein the beta adrenergic agonist is administered from one to four times daily in an amount of from about 0.5 to about 300 mg per dose.

CLMS(3)

3. The process of claim 2 wherein the beta adrenergic agonist is metaproterenol.

CLMS(4)

4. The process of claim 2 wherein the beta adrenergic agonist is isoproterenol.

CLMS(5)

5. The process of claim 2 wherein the beta adrenergic agonist is terbutaline.

CLMS(6)

6. The process of claim 2 wherein the beta adrenergic agonist is albuterol.

CLMS(7)

7. The process of claim 3, 4, 5 or 6 wherein the beta adrenergic agonist is administered in an amount of from about 1 to about 100 mg per dose.

CLMS(8)

8. The process of claim 2 wherein administration of the beta adrenergic agonist provides cytoprotection.

CLMS(9)

9. The process of claim 7 wherein administration of the beta adrenergic agonist provides cytoprotection.

CLMS(10)

10. The process of claim 2 wherein administration of the beta adrenergic agonist provides an antisecretory result.

CLMS(11)

11. The process of claim 7 wherein administration of the beta adrenergic agonist provides an antisecretory result.

1. 5,739,106, Apr. 14, 1998, Appetite regulating compositions; Timothy J. Rink, et al., 514/12, 16, 18, 19; 530/303, 307, 312, 324, 328, 331 [IMAGE AVAILABLE]

2. 5,677,279, Oct. 14, 1997, Methods and compositions for treating pain with **amylin** or **agonists** thereof; Andrew A. Young, 514/12 [IMAGE AVAILABLE]